ABSTRACT

The present invention provides docking heads to be mounted on a graft so as to establish a vascular device that is coupled to a blood vessel with aneurysm, and dedicated delivery devices as well as methods of coupling. The vascular device comprises a graft having docking head at the proximal portion and another docking head at its distal portion, or two docking heads if the graft is bifurcated. The docking heads comprises a hollow truncated cone having a passage adapted to correspond the outer diameter of the graft and is provided with a plurality of outwardly pointing and inclined barbs. The vascular device is coupled to the blood vessel on both sides of the aneurysm while the docking heads act as guiding, anchoring and sealing means in a suture-less and rapid manner. The vascular device is modular and can be prepared according to the condition of the aneurysm and the dimensions of the blood vessels during operation.